

Rhodora

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CONTENTS:

Oedogonium Huntii rediscovered? <i>F. S. Collins</i>	57
Flora of the Boston District,— II.	59
Vascular Plants of the Northeastern States. <i>B. L. Robinson</i>	64
Notes on the Genus Senecio. <i>J. M. Greenman</i>	68
Notes on Habenaria. <i>Oakes Ames</i>	70
Lists of New England Plants,— XIX. Addenda. <i>J. F. Collins</i>	71
Euclidium syriacum in Massachusetts. <i>C. H. Knowlton</i>	72

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OEDOGONIUM HUNTII REDISCOVERED?

F. S. COLLINS.

In the American Naturalist, Vol. 1, p. 517, 1868, is an article entitled "A botanical excursion in my office" in which Horatio C. Wood describes in a popular way a number of minute plants appearing in an aquarium. Figures of some of them are given, 3, 4, 5 & 7 representing an *Oedogonium*, no species being indicated by name. In A Prodrömus of a Study of the Fresh water Algae of North Eastern North America, Proc. Amer. Phil. Soc., Vol. X, p. 333, 1869, the same writer proposes the name of *Oedogonium Huntii* for the plant. This Prodrömus was followed by the more elaborate A Contribution to the History of the Fresh-Water Algae of North America,¹ Smithsonian Contributions to Knowledge, Vol. XIX, 1874. In this the genus *Oedogonium* is broken up into several genera, and our species appears as *Androgynia Huntii* Wood. There is no reference to the Prodrömus, but only "*Syn.-Oedogonium Huntii* Wood, American Naturalist, 1868"; as we have seen, no such name appears in that periodical. Plate XVII, fig. 2, however, evidently represents the same thing as the figure in the Naturalist, and the text, p. 198, speaks of the alga as occurring in Wood's aquarium.

There seems to be nothing more known of the plant; Wolle² condenses Wood's description and copies his figures; Wittrock³ adds nothing. DeToni⁴ puts the description into Latin. Hirn⁵ sum-

¹ So reads the title page; the running title throughout is Fresh-Water Algae of the United States, and this latter form is very generally used in citations referring to the work.

² Fresh Water Algae of the U. S., p. 85, Pl. LXXXIV, fig. 9, 1887.

³ *Oedogonicee Americanae, hucusque cognitae*; Bot. Notiser, p. 136, 1878.

⁴ *Sylloge Algarum*, Vol. I, p. 60, 1889.

⁵ *Monographie und Iconographie der Oedogoniaceen*, Acta Societatis Scientiarum Fennicae, Vol. XXVII, p. 208, 1900.

marizes what we have noticed, except the Am. Nat. and Prodrromus citations, which were unknown to him; and copies Wood's figure as Pl. XXXIV, fig. 213. In a later paper¹ he completes his record by giving the two missing citations.

In Oct., 1906, Prof. F. D. Lambert called my attention to some algae growing in a sunken wooden tub near Tufts College, and on examination I found that among these were filaments bearing slender hairs like those represented in Wood's figures. Unfortunately there was no fruit, and soon after that time the water froze, and nothing more could be done. Visits in the spring of 1907 showed no fruit, but in Sept., 1907, considerable material was obtained with fairly plentiful but not quite mature fruit. The four spiral lines on the spore were not visible, but otherwise everything agreed with the descriptions. About a week later the station was visited in the hope that the ripe fruit might be found; the tub had been covered over and a path made across it; the locality was destroyed.

The identification cannot be considered as absolutely certain, but there is no described species that has the characters of the Tufts College plant, and these characters all agree with those of *Oe. Huntii* at the same stage of development, so that there is at least a strong probability of identity. The terminal hairs are very peculiar; they consist of a series of ten or more superimposed, long, cylindrical cells, each somewhat smaller in diameter than the one below; the effect is like that of a many-jointed spy-glass, pulled out to the full length, except that the terminal cell is much more slender in proportion to the basal cell; not a twentieth of the diameter. Several species are figured with terminal hairs in Hirn's monograph, but none at all resembling this. It is curious that though this structure is plainly shown in Wood's figures and their copies in later authors, descriptions all simply say "long apical seta" or some equivalent phrase. If any one should observe an *Oedogonium* with setae of this character, it is to be hoped that diligent care will be taken to obtain the mature fruit, and that no "improvements" will take place in that vicinity until the fruit is gathered.

MALDEN, MASSACHUSETTS.

¹ Studien ueber Oedogoniaceen, l. c., Vol. XXXIV, p. 38, 1906.

REPORTS ON THE FLORA OF THE BOSTON
DISTRICT—II.

THE local flora committee of the New England Botanical Club has continued to collect information as outlined in its first publication (RHODORA, ix. 81). Numerous botanists have contributed to the work by sending card-records regarding their specimens, and the collections of the Gray Herbarium, the Arnold Arboretum, and the New England Botanical Club have been personally examined. No doubtful records have in any case been included in the following list, and every species is represented by at least one herbarium specimen. Any additions will be welcomed, for the present list is regarded as by no means final.

There is need of much fuller information in regard to soil, moisture and other ecological factors, and future reports to the committee will be of greater value if they are more detailed than most of those we now have.

There is a large block of towns south of the Blue Hills, which are very little known botanically. We have no reports from the South Shore, and Bridgewater, Easton, Canton and Norfolk are the only inland towns which are well represented among our records for this section. The committee therefore urges upon the collectors of this district the importance of more detailed exploration south of the Blue Hills. The Committee will also try personally to collect in these towns as extensively as possible, but there is great need for coöperation in this part of the work.

The *Isoëtaceae* of this list have been contributed by Mr. A. A. Eaton of the Ames Botanical Laboratory. The committee wishes to thank Mr. Eaton for his zealous coöperation in this and other matters connected with the work.

MARSILEACEAE.

MARSILEA.

M. QUADRIFOLIA L. Introduced in muddy bottoms of lakes and streams; Charles and Concord Rivers; Glacialis and vicinity, Cambridge; Malden (1877, *Morong*); Boxford.

EQUISETACEAE.**EQUISETUM.**

- E. arvense** L. Moist sand and gravel, occasional in richer soil. Very common and variable.
- E. sylvaticum** L. Wet fields and woods, frequent.
- E. litorale** Kühlewein. Wet shore of Merrimac River in Amesbury and Newburyport (*A. A. Eaton & Raynal Dodge*).
- E. fluviatile** L. (*E. limosum* L.) Stagnant water. Frequent, especially in northern portion of the district.
- E. hyemale** L., var. *affine* (Engelm.) A. A. Eaton. Moist soil, infrequent. (All the material examined is of this variety, which is distinguished from the typical form by having rounded instead of biangulate ridges).
- E. scirpoides** Michx. Wet clay bank under hemlocks, Amesbury (*A. A. Eaton*).

LYCOPODIACEAE.**LYCOPodium.**

- L. lucidulum** Michx. Damp woods, frequent.
- L. inundatum** L. Wet sand, rare. Not reported south of Boston.
Var. *Bigelovii* Tuckerm. Swamps and borders of ponds, occasional.¹
- L. annotinum** L. Rich woods, abundant in Essex and Manchester.
- L. clavatum** L. Dry woods, occasional.
- L. obscurum** L. Moist woods, occasional.
Var. *dendroideum* (Michx.) D. C. Eaton. As common as the typical form.
- L. complanatum**, L., var. *flabelliforme* Fernald. Originally common in dry woods and pastures, but eradicated in many places.
- L. tristachyum** Pursh. (*L. complanatum*, var. *Chamaecyparissus* Milde.) Open woods and pastures. Abundant in a few localities, but not generally distributed.

¹ Note. The plant reported from Plum Island, Newbury, as *L. alopecuroides* L. (Fern Bulletin v. 4) has been carefully examined, and the committee has decided it is not different from this variety.

SELAGINELLACEAE.

SELAGINELLA.

- S. rupestris** (L.). Spring. Dry rocks, rather common.
- S. apus** (L.) Spring. Wet places; locally abundant in northern portion, occasional elsewhere; probably often overlooked.

ISOËTACEAE.

ISOËTES.

- I. Dodgei** A. A. Eaton, var. **Robbinsii** A. A. Eaton. (*I. canadensis*, var. *Robbinsii* A. A. Eaton, RHODORA, v. 279. 1903.) In Mulberry Meadow Brook, Easton (A. A. Eaton).
- I. Eatoni** Dodge. In Tuxbury's Pond, Amesbury (A. A. Eaton & Raynal Dodge); in Parker River, Byfield (Raynal Dodge). Scarce.
- I. echinospora** Durieu, var. **Braunii** (Durieu) Engelm. Abundant throughout, mostly in mud, but sometimes on sandy shores and bottoms of ponds and large streams.
- Var. **muricata** (Durieu) Engelm. Reported from twelve localities, covering the northern and southern limits of the district. Usually plentiful where found at all.
- I. Engelmanni** A. Br. In ponds and ditches, mostly over a clay subsoil; common in the northern part of the district, but not reported south of the Blue Hills.
- I. foveolata** A. A. Eaton, var. **plenospora** A. A. Eaton. In ponds, North Easton (A. A. Eaton). Plentiful.
- ? **I. Gravesii** A. A. Eaton. Arlington Brook (Wm. Boott). The specimens seen are fragmentary and unsatisfactory.
- I. saccharata** Engelm., var. **Amesii** A. A. Eaton. In ponds on gravelly bottom, North Easton (A. A. Eaton). Abundant.
- I. Tuckermanni** A. Br. In ponds on sandy bottom, common.
- ? Var. **Harveyi** (A. A. Eaton) Clute. Fresh Pond, Cambridge (Wm. Boott). All material seen has been fragmentary and unsatisfactory.
- (Note.—From the material examined, the genus would appear to

have a north-south distribution through the district, but this is doubtless more apparent than real. The genus has been little collected in the region except by Tuckerman, Boott, and others, who have lived in the neighborhood of Boston. When the western portions of the district have been thoroughly explored, they will probably yield a fair quota of species of this genus. *I. lacustris* L. and *I. riparia* Engelm. have been reported in the district, but I have personally examined material of all the collections referred to these species and find it to belong to other species.—A. A. EATON.)

TAXACEAE.

TAXUS.

T. canadensis Marsh. Cold woods; abundant at a few stations.

PINACEAE.

PINUS.

P. Strobus L. Common. The best specimens are those in the Appalachian Club Reservation at Carlisle, where the forest has never been cut off.

P. rigida Mill. Dry sterile soil, very abundant throughout.

P. SYLVESTRIS L. Escaped from cultivation; Danvers (*John Robinson*, Flora of Essex Co., 1880); "trees of all sizes, and some escaped into the roadside, sandy soil" Newburyport, (*Raynal Dodge*); "very rare in mixed woods," Belmont (*A. H. Moore*).

P. resinosa Ait. Dry soil; found sparingly as far south as Chestnut Hill, Brookline.

LARIX.

L. laricina (Du Roi) Koch. Cold swamps, not common.

L. DECIDUA Mill. Self-sown in Hemenway place, Canton (*E. F. Williams*).

PICEA.

- P. rubra** (Du Roi) Dietr. Abundant on rocky hillside near Cape Pond, Rockport (*J. H. Sears*); a single tree in Neponset River meadow, Milton, "in too wet land for an introduced tree" (*G. G. Kennedy*); a few trees in Randolph (*E. F. Williams, G. G. Kennedy*).
- P. mariana** (Mill.) B. S. P. Cold swamps; reported from eleven towns, mostly in northern portions of district.
- P. ABIES** (L.) Karst. (*P. excelsa* Link.) Spontaneous on west side of Blue Hill, evidently from large trees on the Hayward land (*G. G. Kennedy*).

ABIES.

- A. BALSAMEA** (L.) Mill. Reported from a few scattered stations but apparently not native in our range.

TSUGA.

- T. canadensis** (L.) Carr. Cold soil of rocky ridges and ravines, frequent.

CHAMAECYPARIS.

- C. thyoides** (L.) B. S. P. In very wet places throughout, usually forming "cedar swamps"; less common northward.

THUJA.

- T. OCCIDENTALIS** L. Reported from a few stations as introduced.

JUNIPERUS.

- J. communis** L., var. *depressa* Pursh. Dry sterile soil, very common. (True *J. communis* L. is arborescent, and has not been reported in our range).
- J. horizontalis** Moench (*J. Sabina*, var. *procumbens* Pursh). A single large specimen at the north base of Oldtown Hill, Newbury (*A. A. Eaton*). Probably the southern limit.
- J. virginiana** L. Dry soil throughout, common.

(Note.— Other extra-limital species of this family are likely to persist around old places, or occasionally to reproduce themselves. Those trees not known to have reproduced by seed are not included in this list.)

C. H. KNOWLTON,	} <i>Committee on local flora.</i>
J. A. CUSHMAN,	
WALTER DEANE,	
A. K. HARRISON,	

FURTHER NOTES ON THE VASCULAR PLANTS OF THE NORTHEASTERN UNITED STATES.

B. L. ROBINSON.

IN the February issue of RHODORA the writer put on record some new combinations which had been found essential to consistent usage in the work and publications of the Gray Herbarium. Several further combinations of similar nature are given below, together with their synonymy. Those relating to the grasses are published by the kind permission of their respective authors. In several cases these combinations, which have already appeared in the subspecific category, are here put on record in order that they may have also a technical accuracy in the varietal rank, it being likely that they will be so placed by many writers who, according to long-established usage maintain the two categories, subspecies and variety, as being to a certain extent distinct.

SAGITTARIA LATIFOLIA Willd., forma **hastata** (Pursh), n. comb. *S. hastata* Pursh, Fl. Am. Sept. ii. 396 (1814).

PANICUM COLUMBIANUM Scribn., var. **thinium** Hitchc. & Chase, n. comb. *P. unciphyllum*, var. *thinium* Hitchc. & Chase, RHODORA, viii. 209 (1906).

PANICUM BOSCHII Poir., var. **molle** Hitchc. & Chase, n. comb. *P. latifolium*, var. *molle* Vasey, U. S. Dept. Agric. Div. Bot. Bull. viii. 34 (1889).

PANICUM HUACHUCAE Ashe., var. **silvicola** Hitchc. & Chase in litt. quam forma typica altius gracilius laetiore viride minus pubescens;

laminis foliorum tenuibus laxis patentibus 5–10 cm. longis 6–10 mm. latis supra minus dense pilosis subtus appresse pubescentibus sericeis; panicula 5–8(–10) cm. longa, ramis patentioribus; spiculis ellipticis minus turgidis brevioribus pubescentibus; statu autumnale plus minusve decumbente, ramulis fasciculatis quam internodia principalia brevioribus. (*P. lanuginosum* as described by Scribner & Merrill, not Ell.) — Woods and clearings, range of the typical form, more common southward. Type, District of Columbia, *Chase*, no. 2400, in National Herbarium.

MUHLENBERGIA SCHREBERI Gmel., var. **palustris** Scribner in litt. *M. Schreberi*, subsp. *palustris* Scribner, RHODORA, ix. 17 (1907).

SPHENOPHOLIS OBTUSATA (Michx.) Scribner, var. **pubescens** (Scribner & Merrill) Scribner in litt. *Eatonia pubescens* Scribner & Merrill, Circ. U. S. Div. Agrost 27, p. 6 (1900). *S. obtusata*, subsp. *pubescens* Scribner, RHODORA, viii. 143, 144 (1906).

SPHENOPHOLIS OBTUSATA (Michx.) Scribner, var. **lobata** (Trin.) Scribner in litt. *Trisetum lobatum* Trin. Mém. Acad. Pétersb. sér. 6, i. 66 (1831). *S. obtusata*, subsp. *lobata* Scribner, RHODORA, viii. 143, 144 (1906).

SPHENOPHOLIS NITIDA (Spreng.) Scribner, var. **glabra** (Nash) Scribner in litt. *Eatonia glabra* Nash in Britton, Man. 1043 (1901). *S. nitida*, subsp. *glabra* Scribner, RHODORA, viii. 143, 145 (1906).

SPHENOPHOLIS PALLENS (Spreng.) Scribner, var. **major** (Torr.) Scribner in litt. *Koeleria truncata*, var. *major* Torr. Fl. U. S. 117 (1824). *S. pallens*, subsp. *major* Scribner, RHODORA, viii. 143, 145 (1906).

SPHENOPHOLIS PALUSTRIS (Michx.) Scribner, var. **flexuosa** Scribner in litt. *S. palustris*, subsp. *flexuosa* Scribner, RHODORA, viii. 143, 145 (1906).

TRisetum MELICOIDES (Michx.) Vasey, var. **majus** Hitchc., n. comb. *Graphephorum melicoides*, var. *major* Gray, Ann. Bot. Soc. Can. i. 57 (1861) & Proc. Am. Acad. v. 191 (1861).

PUCCINELLIA **Borreri** (Bab.) Hitchc., n. comb. *Festuca Borreri* Bab. Trans. Linn. Soc. xvii. 565 (1837).

FESTUCA RUBRA L., var. **prolifera** Piper in litt. *F. rubra*, subsp. *prolifera* Piper, Contrib. U. S. Nat. Herb. x. 21 (1906).

ELYMUS VIRGINICUS, var. **hirsutiglumis** (Scribn.) Hitchc. in litt. *E. hirsutiglumis* Scribn. U. S. Dept. Agric. Div. Agrost, Bull. xi. 58 (1898).

AMARANTHUS HYBRIDUS, forma **hypochondriacus** (L.), n. comb. *A. hypochondriacus* L. sp. Pl. ii. 991 (1753). *A. hybridus*, var. *hypochondriacus* Robinson, RHODORA, x. 32 (1908), by clerical error.

ACTAEA RUBRA (Ait.) Willd., forma **neglecta** (Gillman), n. comb. *A. neglecta* Gillman in Lloyd, Drugs and Medicines, 235 (1884-5). *A. eburnea* Rydb. Mem. N. Y. Bot. Gard. i. 153 (1900). This is the problematic *Actaea*, seemingly merely a color form of *A. rubra*, which has white berries on slender pedicels.

BACOPA **acuminata** (Walt.), n. comb. *Gratiola acuminata* Walt. Fl. Car. 61 (1788). *Maturea nigrescens* Benth. Comp. Bot. Mag. i. 173 (1835). *Herpestis nigrescens* Benth. Comp. Bot. Mag. ii. 56 (1836). *Monniera acuminata* Ktze. Rev. Gen. ii. 463 (1891). This new combination and the next are necessitated by the legalization of *Bacopa* through its inclusion in the list of nomina conservanda of the Vienna Rules.

BACOPA **caroliniana** (Walt.), n. comb. *Obolaria caroliniana* Walt. Fl. Car. 166 (1788). *Monniera amplexicaulis* Michx. Fl. Bor. Am. ii. 22 (1803). *Herpestis amplexicaulis* Pursh, Fl. Am. Sept. 418 (1814). *Monniera caroliniana* Ktze. Rev. Gen. ii. 463 (1891).

ILYSANTHES. For some years it has been known that there are two kinds of *Ilysanthes* growing in the northeastern United States. Whether these are to be regarded merely as varieties of the same species or are better treated as fairly independent species is still to some extent an open question. For the latter course it may be urged that the ranges of the two are not entirely identical, that the differences of the plants in question, when once understood, are pretty readily seen, and finally that the copious material of the two, collected during recent years, instead of showing further evidence of intergradation, tends rather to prove a fairly high degree of constancy in their differences. Accepting at least provisionally the view that these plants are better treated as species, we are confronted with the problem of their specific nomenclature. The plants in our present discussion may be distinguished as I and II with the following salient distinctions.

I. Leaves relatively large, ovate to oblong; lower pedicels only about as long as the subtending leaves or shorter; calyx-lobes linear about equalling or slightly exceeding the ellipsoidal pod.

II. Leaves smaller; pedicels long and filiform, even the lower ones much exceeding the subtending leaves; calyx-lobes somewhat shorter than the pod.

In his paper on the North American Species of *Ilysanthes*, Bull. Torr. Bot. Club, xxiii. 296 et seq. (1896), Dr. J. K. Small treats plant II as *I. gratioloides* (L.) Benth. and makes for plant I a new combination *I. attenuata* (Muhl.) Small, regarding it identical with *Lindernia attenuata* Muhl. Cat. 59 (1813).

Some years later Dr. J. H. Barnhart, Bull. Torr. Bot. Club, xxvi. 376 (1899), calls attention to the fact that the name *I. gratioloides* (L.) Benth., founded upon *Capraria gratioloides* L. Sp. Pl. ed. 2, ii. 876 (1763), must give place to *I. dubia* (L.) Barnhart, founded upon the earlier and identical *Gratiola dubia* L. Sp. Pl. i. 17 (1753). It is to be noticed that subsequent writers, *e. g.* Britton, Man. 830 (1901), have assumed that Dr. Barnhart as well as Dr. Small regarded the Linnaean species (founded upon Clayton's no. 164 collected in Virginia) as being the small-leaved long-pediceled form which we have called plant II. However, the description which Gronovius himself gave of this plant of Clayton's, — see Gronovius, Fl. Virg. 73, 129 (1739), — contains the significant words *pedunculis solitariis unifloris longitudine foliorum*, an expression strongly pointing to its identity not with plant II but with plant I. To make sure of this identity the writer applied to Mr. E. G. Baker of the British Museum of Natural History to examine the still extant specimen of Clayton. This he most kindly did and sent a tracing of it to the Gray Herbarium showing conclusively its identity with the larger-leaved relatively shorter-pediceled form, which Dr. Small has called *I. attenuata*.

In the light of this new information the two species in question would seem to require the following nomenclatorial treatment.

I. *I. DUBIA* (L.) Barnhart, Bull. Torr. Bot. Club, xxvi. 376 (1899), as to actual Linnaean type. *Gratiola dubia* L. Sp. Pl. i. 17 (1753). *Capraria gratioloides* L. Sp. Pl. ed. 2, ii. 876 (1763). *Lindernia attenuata* Muhl. Cat. 59 (1813). *Gratiola attenuata* Spreng. Syst. i. 39 (1825). *I. gratioloides* Benth. in DC. Prodr. x. 419 (1846). *I. riparia* of many auth., at least in part, probably not of Raf. *I. gratioloides*, var. *curtipedicellata* Bush, Bull. Torr. Bot. Club, xxi. 494 (1894). *I. attenuata* Small, Bull. Torr. Bot. Club, xxiii. 297 (1896).

II. *I. anagallidea* (Michx.), n. comb. *Gratiola anagallidea* Michx. Fl. Bor. Am. i. 6 (1803). *Lindernia dilatata anagallidea* Muhl. Cat. 59 (1813). *L. pyxidaria* Pursh, Fl. Am. Sept. 419 (1814). ? *I. riparia* Raf. Ann. Nat. 13 (1820). *I. dubia* of auth., not of Barnhart as to the Linnaean type.

RUDBECKIA SPECIOSA Wenderoth, var. **Sullivanti** (Boynton & Beadle), n. comb. *R. Sullivanti* Boynton & Beadle, Biltmore Bot. Stud. i. 15 (1901).

COREOPSIS MAJOR Walt., var. **stellata** (Nutt.), n. comb. *C. stellata* Nutt. Journ. Acad. Philad. vii. 76 (1834). *C. senifolia*, var. **stellata** T. & G. Fl. ii. 342 (1842). *C. major*, var. *Oemleri* Britton, Mem. Torr. Bot. Club, iv. 131 (1894). *C. Oemleri* Ell. Sk. ii. 435 (1823). The name *stellata* must be taken up in place of *Oemleri* as the varietal designation since it has priority in the category in which it is here used.

ACTINEA **herbacea** (Greene), n. comb. *Actinella scaposa*, var. *glabra* Gray, Man. ed. 5, 263 (1867). *Tetraneuris herbacea* Greene, Pittonia, iii. 268 (1898).

NOTES ON THE GENUS SENECIO.

J. M. GREENMAN.

DURING the season of 1904 Messrs. J. F. Collins, M. L. Fernald and A. S. Pease collected in the Province of Quebec several *Senecios* which were referred to the writer for identification. One of these appeared to be intermediate in general aspect between *Senecio aureus* L. and *S. Balsamitae* Muhl., and upon a detailed study it was characterized as a probable hybrid between these species; publication was suspended, however, in the hope that further collections from different localities would produce additional material giving cumulative evidence of hybridity.

In June of last year the writer, while botanizing near Lake Michigan in the vicinity of Beach, Lake County, Illinois, found a large colony of *Senecio Balsamitae* growing in sandy soil, and near by in moist situations *Senecio aureus* L. was also relatively abundant. Associated with these two species in low wet meadows in limited number was noticed a peculiar *Senecio* intermediate in size and foliar characters between the two species mentioned. This form has since been examined more in detail, and the intermediate characters were found to extend to the different parts of the head. Moreover, upon com-

parison of my plant with the specimens secured in eastern Quebec by Collins, Fernald and Pease the two appear to be identical. On the whole there is every reason to believe that the plant in question is a natural hybrid, and it seems worthy of characterization as follows:

Senecio aureus* > × *Balsamitae, n. hyb., caulibus erectis 2.5–8 dm. altis glabratis vel sparse lanato-tomentosis; foliis inferioribus petiolatis oblongo-rotundatis vel oblongo-ovatis vel subellipticis 1–6 cm. longis 1–3.5 cm. latis, apice rotundatis vel obtusis marginibusque crenato-dentatis vel rarius acute-dentatis, basi subcordatis vel abrupte contractis et cuneatis superioribus lyratis vel laciniato-pinnatifidis; petiolis 2–15 cm. longis gracilibus; acheniis glabratis vel sparse pilosis.—Stem erect, 2.5 to 8 dm. high, glabrous or nearly so; lower leaves oblong-rotund to oblong-ovate or subelliptic, 1 to 6 cm. long, 1 to 3.5 cm. broad, rotund to obtuse at the apex, crenate-dentate or occasionally rather sharply toothed, the earliest subcordate, the later either abruptly or rather gradually contracted at the base into the petiole; petioles 2 to 15 cm. long, slender; stem-leaves lyrate to lacinate-pinnatifid; inflorescence few to many-headed: heads medium sized: achenes glabrous or sparingly pilose, about one-third approximately developing perfect embryos.—Wet alluvial shores between Baldié and the Baie des Chaleurs, Bonaventure River, Province of Quebec, 5, 6, and 8 August, 1904, *Collins, Fernald & Pease* (hb. Gray); in low wet meadows, vicinity of Beach, Lake County, Illinois, 16 June, 1907, *Greenman*, nos. 1991, 2022 (hb. Field Mus.). Associated with the two parent species, and intermediate in size, leaf-outline and in technical characters of the head, bearing rather more the general aspect, however, of *S. aureus*.

SENECIO BALSAMITAE Muhl., var. ***Crawfordii*** (Britton), n. comb. *S. Crawfordii* Britton, *Torrey*, i. 21 (1901). This plant, although at first taken to be distinct from *S. Balsamitae* Muhl., upon the examination of a large series of specimens can scarcely be regarded as of more than varietal rank. Its somewhat more luxuriant growth, than is characteristic of typical forms of the species, is most probably due to the moist rich habitat in which it was growing.

FIELD MUSEUM OF NATURAL HISTORY, Chicago.

NOTES ON HABENARIA.

OAKES AMES.

Habenaria dilatata var. **media** (Rydb.) n. comb.—*Limnorchis media* Rydb. Bull. Torr. Bot. Cl. **28**: 618 (1901).

The original specimen on which *H. dilatata* was based is in the herbarium of the British Museum. It was collected by Sir Joseph Banks in Newfoundland in 1766, and described by Pursh as *Orchis dilatata* in his *Flora Americae Septentrionalis*. The common New England form is considerably taller than the Banksian specimen and might readily be taken for a distinct species if it were not for perfect agreement in specific details. Strangely enough the form characteristic of the type is extremely rare in herbaria and is best matched by a series of specimens collected in high alpine bogs on Mt. Albert, Gaspé Co., Quebec, where they were found in August, 1905, at an altitude between 900 and 1050 meters by Collins and Fernald. The range of variation between the type and the luxuriant specimens frequently found in New England is sufficiently enormous to induce caution where new species are contemplated. *H. dilatata* is a widely distributed species and consequently adaptable to conditions which have a marked influence on growth. An examination of large quantities of material has convinced me that Dr. Rydberg's *Limnorchis media* is simply a variety of *H. dilatata* characterized by yellowish-green flowers. The labellum is slightly rhombic-lanceolate and the rostellar glands are similar to those of *H. dilatata*. The living specimens which I have examined have all been deliciously fragrant as is the case with typical *H. dilatata*.

Habenaria blephariglottis var. **conspicua** (Nash) n. comb.—*H. conspicua* Nash Bull. Torr. Bot. Cl. **23**: 100 (1896) — *Blephariglottis conspicua* Small Fl. Se. U. S. 313 (1903).

This variety differs from the type mainly in its longer spur, and is the common form in the southern states.

H. × Canbyi hybr. nov. (*H. cristata* × *H. blephariglottis*).

This interesting natural hybrid was collected near Lewes, Delaware in July, 1878, by Wm. M. Canby. At the time it was discovered its hybrid origin was suspected. The following transcript from the collector's notes is of interest:

"*Habenaria cristata* \times *blephariglottis*? Intermediate in color, size of flowers, openness of panicle, etc. between the two species. Hab., Swamp near Lewes, Delaware, in company with *H. cristata* and *H. blephariglottis*, July 27, 1878."

The labellum of the hybrid is more or less ragged-fringed, 7 mm. long, more closely resembling *H. cristata* than *H. blephariglottis*. The length of the spur is 12 mm. and consequently of very great diacritical value, as in combination with other characters more or less intermediate between the parent species it excites that suspicion as to origin which usually results in the detection of natural hybrids.

The foliage is intermediate.

Type in Hb. College of Pharmacy, New York City.

NORTH EASTON, MASSACHUSETTS.

PRELIMINARY LISTS OF NEW ENGLAND PLANTS,—XIX. ADDENDA.—Since the publication of "Preliminary Lists of New England Plants,—XIX." (RHODORA, 8:131, July, 1906), several new records for some of the mosses there listed have been reported to the writer, in most cases accompanied by specimens. To bring this list to date the additions and corrections noted below should be incorporated.

In RHODORA (4:239) Mr. A. LeR. Andrews records finding *Buxbaumia indusiata* Brid. on Mt. Greylock, Mass. In the manuscript for the original list a dash (—), based upon this record, appears in the column for Massachusetts, but through some oversight in proof-reading its omission in the printed list passed unnoticed. It should be inserted.

Catharinaea Macmillani Holz. was originally described by Professor J. M. Holzinger, in 1903,¹ from sterile specimens collected in Minnesota. In RHODORA (9:98) Mr. E. B. Chamberlain fully described both gametophyte and sporophyte of this species and published illustrations, together with complete data in regard to its discovery in New England. A cross (+) should be inserted in the "Me." column and a dash (—) in the "Conn." column.

Catharinaea crispa James has been collected by Miss A. L. Crockett

¹ Minn. Bot. Studies, 3: 120.

in Camden, Maine, as recorded in RHODORA (9:74), and in East Hartford, Connecticut, by Mr. C. A. Weatherby. A cross should be inserted in both the columns indicated.

Pogonatum alpinum var. *arcticum* (Sw.) Brid. In June, 1906, Professor Fernald and the writer made a brief visit to Salisbury, Connecticut, where, in Sage's Ravine, a few sterile specimens of this moss were collected, but they were not determined until later in the year, after the printed list appeared. According to government maps of this ravine the specimens undoubtedly grew in Connecticut, though only a few rods from the Massachusetts boundary.

Polytrichum commune var. *perigoniale* (Mx.) Bry. Eur. Specimens of this variety, collected in Vermont, are in the herbarium of Dr. Abel J. Grout, this state being the only one from which it had not been seen at the time the list was published.

Polytrichum gracile Dicks. was recorded from the Rangeley Lakes, Maine, in RHODORA (9:64) by Mrs. E. M. Dunham. As there stated the specimens examined by the writer were not quite typical. A cross (+) should be used in recording the last three mosses.—J. FRANKLIN COLLINS, Providence, Rhode Island.

EUCLIDIUM SYRIACUM IN MASSACHUSETTS.—On June 23, 1907, while collecting in Dedham, Mass., I came across an abandoned henyard. Here, with *Erysimum cheiranthoides* L. and *Lepidium apetalum* Willd., grew one specimen of a peculiar plant which I did not recognize as a crucifer. With the assistance of Dr. B. L. Robinson I have identified the plant as *Euclidium syriacum*, R. Br., a field plant ranging from lower Austria and Russia to Persia, Baluchistan and Cashmere. The following description may lead to further reports of this waif, which so far as I know has never been reported in this country before. The specimen I have given to the Gray Herbarium.

Branching, hairy, 3 dm. tall; leaves 2.5–3 cm. long, alternate, rough, with small distant denticulations; flowers inconspicuous, yellow scattered on naked tips of branches; fruit densely rough-pubescent, 2–4 mm. long, with an abruptly reflexed beak of nearly the same length; seeds few.—C. H. KNOWLTON, Boston, Mass.

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